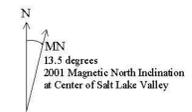


Simple Site-Response Map of Northern Utah

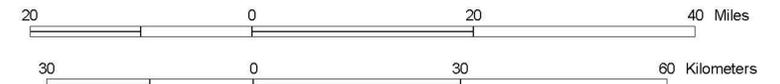
by
Lorraine Nelms
University of Utah Seismograph Stations
and
Francis X. Ashland
Utah Geological Survey

Digital map compilation by Lorraine Nelms
University of Utah Seismograph Stations
and
James A. McBride and Neil D. Storey
Utah Geological Survey

2001



Scale: 1:500,000



Mean shear-wave velocity (V_{s30}) and description of QTMP site-response units.

Unit	V_{s30} ¹ (m/sec)	Description
Q	234	Quaternary unconsolidated sediments including deposits formed by Lake Bonneville (the Bonneville Alloformation) and latest Pleistocene to Holocene stream, alluvial-fan, and deltaic deposits; overlies unconsolidated Tertiary valley fill locally.
T	1023	Tertiary sedimentary and volcanic rocks, Quaternary basalts (near Delta), and tufa-cemented soils (near Midway); excludes Tertiary intrusive rocks.
M	1449	Mesozoic sedimentary rocks.
P	2197	Paleozoic and older sedimentary, igneous, and metamorphic rocks; and Tertiary intrusive (igneous) rocks.

¹ Logarithmic mean.



INDEX MAP



LOCATION OF PREHISTORIC LAKE BONNEVILLE

Research supported by the Utah Division of Comprehensive Emergency Management, the University of Utah Seismograph Stations, and the U.S. Geological Survey (USGS), Department of the Interior, under USGS award numbers 1434-HQ-97-GR-03126 and 99HQGR0091. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government and other supporting agencies.

This map is intended primarily for use in implementing ShakeMap in northern Utah. The information presented on this map has some limited value in understanding site response during earthquake ground shaking in areas outside the Wasatch Front urban corridor (see plate 2). However, the map should not be used as a substitute for site-specific geotechnical investigations conducted by qualified professionals. Considerable variation in shear-wave velocity exists in unit Q. The applicability of the mean V_{s30} values for this unit is uncertain outside the limits of Lake Bonneville.

